

**WHAT IS CLAIMED:**

1. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

- 5           determining block boundaries;
- determining an approximate metric of artifact visibility;
- adaptively filtering luminance;
- adaptively adjusting local saturation variation;
- adaptively simulating high spatial frequency image detail;

10   wherein the adaptive steps are executed to a degree or an amount dependent on the metric of artifact severity.

2. The method of claim 1 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries

15   3. The method of claim 1 wherein in conjunction with adaptively filtering luminance, chrominance is adaptively filtered.

20   4. The method of claim 2 wherein in conjunction with adaptively filtering luminance, chrominance is adaptively filtered.

5. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

- 25           determining block boundaries;
- determining an approximate metric of artifact visibility;
- adaptively filtering luminance with a filter;
- adaptively increasing local chrominance contrast;
- adaptively simulating high frequency image detail by means of sharpening and addition of noise;

30   wherein the adaptive steps are executed to degree that depends on the metric of artifact visibility.

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6. The method of claim 5 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries.

5 7. The method of claim 5 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

8. The method of claim 6 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

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9. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

determining block boundaries;

adaptively filtering luminance; and

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adaptively adjusting local saturation variation.

10. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps sharpening of existing detail and simulating missing detail by the addition of noise.

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11. The method of claim 10 including a step of adaptively filtering luminance.

12. The method of claim 11 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries.

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13. The method of claim 10 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

14. The method of claim 12 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

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15. A method of reducing artifacts in an image previously processed by block transform encoding comprising the step of selecting a median filter window based on an assessment of a pixel value according to a variance of a binary mask.

5 16. The method of claim 1 wherein the pixel value comprises luminance texture.

17. A method of reducing artifacts in an image comprising the step of selecting a median filter window based on an assessment of a pixel value according to a variance of a binary mask.

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18. A computer having software and hardware therein that is capable of executing and performing the method of claim 1.

19. A computer having software and hardware therein that is capable of executing and performing the method of claim 2.

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20. A computer having software and hardware therein that is capable of executing and performing the method of claim 5.

21. A computer having software and hardware therein that is capable of executing and performing the method of claim 8.

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22. A computer having software and hardware therein that is capable of executing and performing the method of claim 10.

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23. A computer having software and hardware therein that is capable of executing and performing the method of claim 15.

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